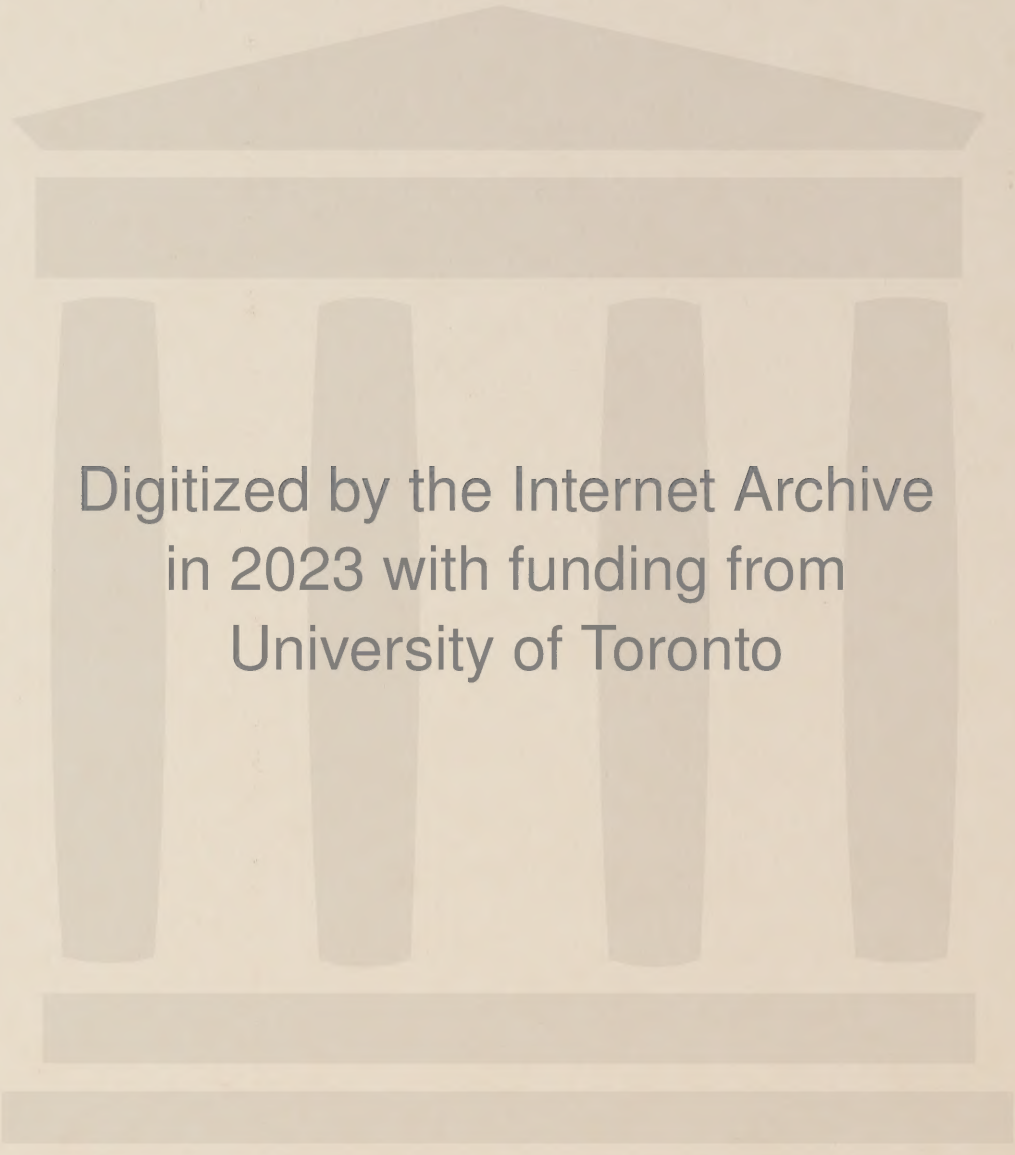

Ontario

Chairman:
Stefan Dupré, Ph.D.
Commissioners:
Fraser Mustard, M.D.
Robert Uffen, Ph.D., P.Eng., F.R.S.C.
Director of Research:
Donald Dewees, Ph.D.
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Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario

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No: 82-4

NEWSLETTER

October 1982

1. The Royal Commission on Asbestos -- Public Hearings

The Commission conducted an intensive series of public hearings this summer, wherein witnesses gave sworn testimony on such subjects as standard-setting, enforcement and implementation, and workers' compensation. The complete list of witnesses who appeared before the Commission between May 20th and August 24th is as follows:

Dr. Peter Barth	Author, "Workers' Compensation and Asbestos in Ontario," RCA Study No. 2.
Mr. Jack Cashman	Manville Canada Inc.
Mr. Gunnar Daniellson	Swedish National Board for Occupational Health and Safety
Dr. Douglas Dyer	Ontario Workmen's Compensation Board
Mr. Lars Ettarp	Swedish Ministry of Labour
Dr. Keith Fitzgerald	Scarborough Department of Health
Mr. Eugene Girdauskas	Canadian Union of Operating Engineers and General Workers, Local 110
Mr. Arthur Gladstone	Ontario Ministry of Labour
Dr. Cameron Gray	Ontario Workmen's Compensation Board
Mr. Ross Hunt	British Belting and Asbestos Ltd. (BBA Group)
Dr. Paul Kotin	Johns-Manville Corporation
Mr. Harald Linton	Swedish Ministry of Labour
Mr. Al MacDonald	Ontario Workmen's Compensation Board
Mr. Bruce Machin	Manville Canada Inc.
Mr. John McDonald	Ontario Workmen's Compensation Board
Mr. James McNair	Ontario Ministry of Labour
Mr. Walter Melinyshyn	Ontario Ministry of Labour
Mr. William Pearce	Ontario Workmen's Compensation Board
Dr. Peter Pelmear	Ontario Ministry of Labour
Mr. Gyan Rajhans	Ontario Ministry of Labour
Dr. Alexander Ritchie	Toronto General Hospital
Mr. Robert Sass	Saskatchewan Department of Labour

Mr. William Simpson	U.K. Health and Safety Executive
Mr. Ed Stevens	Manville Canada Inc.
Dr. Charles Stewart	Ontario Workmen's Compensation Board
Dr. Jerome Vingilis	Formerly - Ontario Ministry of Labour
Dr. Bailus Walker	Formerly - U.S. Occupational Safety and Health Administration
Mr. Arne Westlin	Swedish National Board for Occupational Health and Safety
Mr. Robert Wilson	Ontario Hydro

In addition, the following people made oral presentations before the Commission regarding written submissions they had filed on workers' compensation. This "Phase III" hearing took place on July 5, 1982.

Mr. Ed Cauchi	"Asbestos Victims of Ontario"
Mrs. Odette Dodds	"Asbestos Victims of Ontario"
Mrs. Betty Glaser	"Asbestos Victims of Ontario"
Mrs. Camille Haineault	"Asbestos Victims of Ontario"
Mr. Mike Jones	International Association of Heat and Frost Insulators and Asbestos Workers
Mr. Floyd Lefebvre	Former Asbestos Worker
Mr. Joseph Pagnello	"Asbestos Victims of Ontario"
Ms. Moraq Perkins and Mrs. Lilian Perkins	"Asbestos Victims of Ontario"
Mr. Daniel Ublansky	Energy and Chemical Workers Union

Transcripts of these hearings are available for reading in the Commission's library room, Suite 2214, 180 Dundas Street West, Toronto. (Purchasing information is available upon enquiry to Linda Kahn at the Commission.)

2. Royal Commission on Asbestos -- Research

The Royal Commission on Asbestos has now published eight research papers. The first six in the Study Series were outlined in Newsletter No. 82-2, in April 1982. Studies No. 7 and 8 are described below. Please note that all studies were commissioned by the Royal Commission on Asbestos, but that the views expressed therein are those of the authors and do not necessarily reflect the views of the members of the Commission or its staff.

Study No. 7 THE TECHNICAL FEASIBILITY AND COST OF CONTROLLING WORKPLACE EXPOSURE TO ASBESTOS FIBRES (150 pages)

by Gordon M. Bragg

Dr. Gordon Bragg of the Department of Mechanical Engineering at the University of Waterloo reviews past studies and analyzes new data to evaluate the technical feasibility and cost of achieving various levels of control of asbestos fibres in the workplace. Professor Bragg separates the manufacturing process into a number of discrete processes, and analyzes the control of fibre release separately for each process. He then estimates control costs for a hypothetical brake manufacturing plant, a gasket and packing plant, and a small gasket plant. The attitudes of the firms toward future use of asbestos and the substitution of other materials is discussed.

The control of fibre levels in manufacturing can be achieved by substituting other materials for asbestos, by using exhaust ventilation to gather fibres released in a process before they reach the worker, by wetting the asbestos materials so fibres cannot become airborne, by building an enclosure around the process, and by other methods. All of these control methods have been available for many years, but fibre exposures have declined over time because of more extensive use of these controls and greater sophistication in their application.

The study concludes that there are a small number of processes that cannot be controlled by engineering methods below 2.0 fibres/cc. Many processes can achieve a 1.0 fibre/cc level at a modest cost increase above present controls. The 0.5 fibre level is also achievable in many processes, but at a considerably greater cost. Trying to achieve a level of 0.1 fibre/cc would present serious feasibility problems in many processes, would be significantly more costly than the 0.5 fibre level, and would raise problems of measuring such low levels with sufficient accuracy. A few processes and plants, however, appear to achieve the 0.1 fibre/cc level most of the time. Controls below the 1 fibre/cc level generally require enclosure of the machinery to prevent fibre escape, the use of local exhaust ventilation, and careful cleaning of any spilled or waste asbestos material. Many small plants have difficulty securing the expertise needed to design, install and operate highly effective control systems. Future reductions in the exposure of Ontario workers to asbestos will primarily come not from new technology, but from better and more extensive applications of control methods that have already been proven.

Study No. 8 ASBESTOS IN BUILDINGS (337 Pages)

by Donald J. Pinchin

Dr. Donald Pinchin, the head of D.J. Pinchin Technical Consulting, has, in cooperation with the Ontario Research Foundation, studied the problems presented by the presence of asbestos in Ontario buildings. The study includes a review of the results of previous scientific work performed in various countries, and the collection, presentation and discussion of new data from Ontario.

Dr. Pinchin estimates that between 2% and 10% of the floor area of Ontario buildings other than residences may contain sprayed asbestos-containing insulation. Sprayed asbestos is rare in private homes or apartment buildings. Friable asbestos-containing pipe and boiler insulation can probably be found in a larger proportion of these buildings, but they are often localized in particular areas of the building such as boiler rooms. Most of the sprayed insulation is in multi-storey buildings constructed between 1950 and 1970.

While any friable products that contain asbestos have the potential of releasing airborne fibres, buildings with such products do not necessarily have airborne asbestos fibre levels significantly above normal levels in other buildings or outdoors. Elevated airborne asbestos fibre levels usually require some disturbance of friable materials by building occupants, by maintenance workers, or during building renovation or demolition. In some cases routine cleaning activities can produce elevated fibre levels. It is rare, however, that fibre levels in buildings approach the recently adopted Ontario standards for the exposure of workers to asbestos fibres, and it is uncommon for them to exceed the current environmental guideline.

Dr. Pinchin discusses methods of dealing with asbestos problems in buildings including management and custodial control, spraying on a coating to encapsulate the material, enclosing the material, or removing it. He concludes that encapsulation or enclosure are only appropriate for pipe and boiler insulation, and in a few other special cases. Sprayed asbestos-containing material may be left intact if it is not releasing fibres and is not often disturbed. If the material is in poor condition or will be seriously disturbed so that there will be substantial fibre release, then removal is the best control option. However, removal must be performed very carefully to avoid substantial exposure of the control workers, or leaving some asbestos in the building.

He concludes: "It is the author's judgement that there is no need to remove all sprayed material at once, but that all sprayed friable materials should be removed prior to building demolition if the object is to prevent exposure of the demolition workers and the general population to very elevated airborne asbestos fibre concentrations."

This study suggests that the risk of substantial fibre exposure is generally low for general building occupants. The more important risk is that faced by the cleaning and custodial staff, maintenance workers, and ultimately demolition workers who may experience high exposures when they disturb the asbestos material.

Recommendations are made regarding appropriate methods of inspecting buildings for asbestos hazards and for dealing with any hazards that are discovered.

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Copies of Commission studies have been lodged at all 56 "full depository" libraries, most of which are public, university, or college libraries located in Ontario. The Commission has a list of these libraries if you wish to check if "your" library is on the circulation list; call collect, 416/965-1885 (or you can simply contact the reference desk of your local library).

The Commission also has copies of the studies on hand in its library room, Suite 2214, of 180 Dundas Street West, for interested readers.

Copies of all studies can be purchased in person at the Ontario Government Bookstore, 880 Bay Street, Toronto, Ontario (Telephone: 416/965-2054); or by contacting the Publications Mail Order Service, 880 Bay Street, 5th floor, Toronto, Ontario, M7A 1N8 (Telephone: 416/965-6015).

Prices for the studies are noted below. (Cheques or money orders are made payable to the Treasurer of Ontario and sent to the Publications Mail Order Service.)

Study No. 1	COLLECTIVE BARGAINING AND ASBESTOS DANGERS IN THE WORKPLACE by Morley Gunderson and Katherine Swinton (ISBN: 0-7743-6834-9).	$ 6.50
Study No. 2	WORKERS' COMPENSATION AND ASBESTOS IN ONTARIO by Peter S. Barth (ISBN: 0-7743-7024-6).	$ 5.50
Study No. 3	POLICY OPTIONS IN THE REGULATION OF ASBESTOS-RELATED HEALTH HAZARDS by Michael J. Trebilcock and Carolyn J. Tuohy (ISBN: 0-7743-7043-2).	$10.00
Study No. 4	THE POLITICS OF RISK: THE IDENTIFICATION OF TOXIC AND OTHER HAZARDOUS SUBSTANCES IN CANADA By G. Bruce Doern (ISBN: 0-7743-6960-4).	$ 4.25
Study No. 5	LIVING WITH CONTRADICTIONS: HEALTH AND SAFETY REGULATION AND IMPLEMENTATION IN ONTARIO By G. Bruce Doern, Michael Prince, and Garth McNaughton (ISBN: 0-7743-7056-4).	$10.00
Study No. 6	WORKER ATTITUDES ABOUT HEALTH AND SAFETY IN THREE ASBESTOS BRAKE MANUFACTURING PLANTS by Sally Luce and Gene Swimmer (ISBN: 0-7743-7057-2).	$ 5.00
Study No. 7	THE TECHNICAL FEASIBILITY AND COST OF CONTROLLING WORKPLACE EXPOSURE TO ASBESTOS FIBRES by Gordon M. Bragg (ISBN: 0-7743-7311-3).	$ 5.50
Study No. 8	ASBESTOS IN BUILDINGS by Donald J. Pinchin (ISBN: 0-7743-7323-7).	$10.00

Further information on publications should be addressed to Ms. Linda Kahn, Executive Co-ordinator, or Dr. Donald Dewees, Director of Research, Royal Commission on Asbestos, 180 Dundas Street West, 22nd floor, Toronto, Ontario, M5G 1Z8 (Telephone: 416/965-1885).

3. Royal Commission on Asbestos -- General Information

At the Commission's last hearing on August 24th, Chairman J. Stefan Dupré reminded participants and members of the audience that he had earlier said that the Commission's final report would be ready seven months after the completion of public hearings. At this time, the Commission is waiting to hear from its Parties-with-Standing about their desire for a final "summing-up" hearing day. (Readers interested in this matter may wish to call the Commission at 416/965-1885 after October 29.) Nevertheless, if we consider August 24th as the last hearing day, and barring any unforeseen circumstances, the Commission hopes to hand its report to the printers by the end of March 1983.